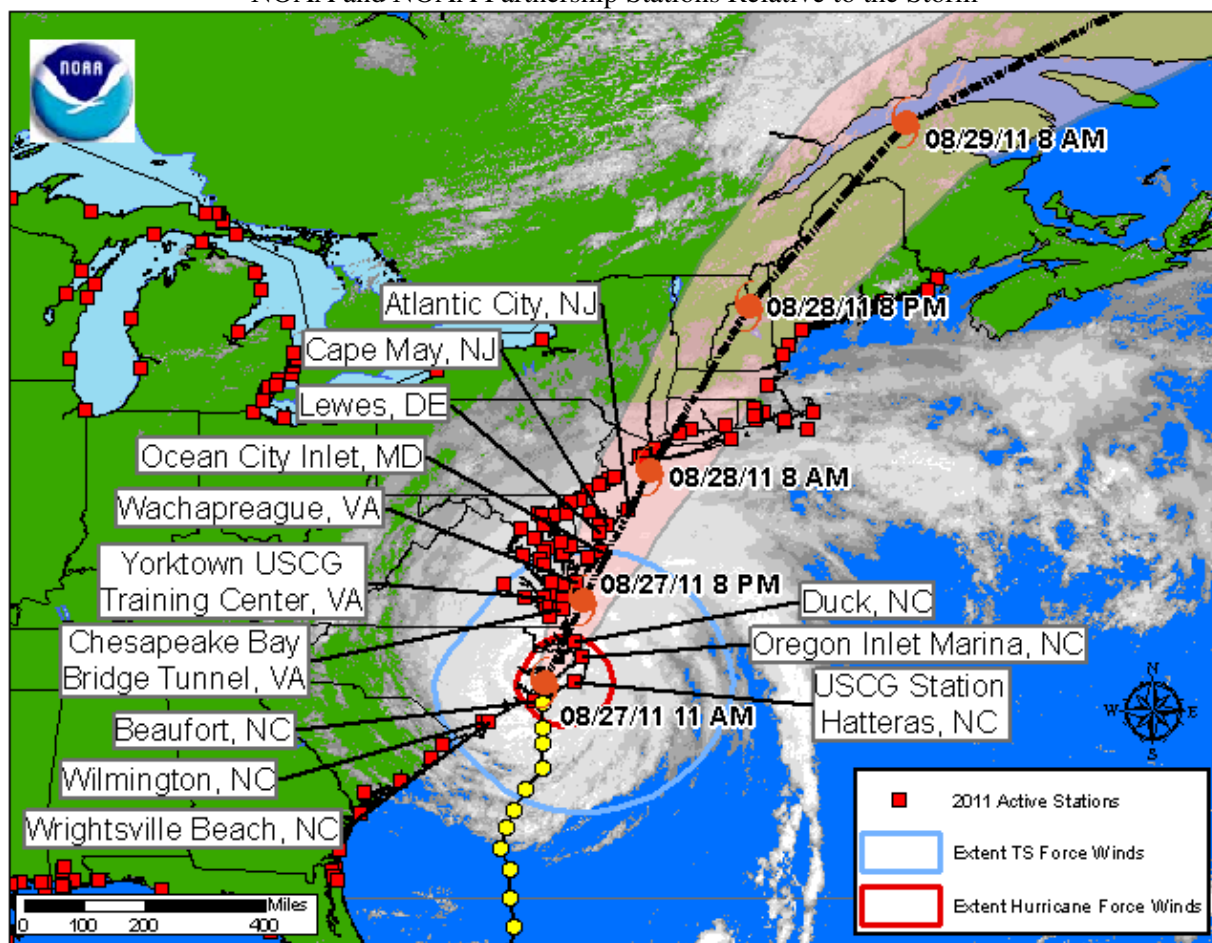




Hurricane IRENE QuickLook  
Posted: 12:00 EDT 08/27/2011

#### NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 08/27/2011 12:00 EDT, water levels along the North Carolina northern coast and Virginia are being significantly affected by Hurricane Irene. Levels between Beaufort, NC and Lewes, DE are elevated between 1.1 and 2.6 feet above predictions. Water levels at Wrightsville Beach, USCG Station Hatteras and Oregon Inlet Marina, NC are presently 0.8 to 3.1 feet below predictions. Water levels from Wilmington, NC to Florida are falling or have returned to near predicted values. Stations in New Jersey are beginning to rise above predictions.

Winds continue to rise ahead of the storm and range between 30 and 50 kts with gusts as high as 69 kts measured at USCG Hatteras, NC. Winds around the entrance to the Chesapeake Bay are also rising and range between 20 and 35 kts with gusts up to 55 kts at Chesapeake Bay Bridge Tunnel, VA.

Barometric pressure continues to fall significantly from Duck, NC northward. Barometric Pressure has bottomed out and is rising from Beaufort, NC southward.

## Hurricane IRENE QuickLook, POSTED 12:00 EDT 08/27/2011

Please note that the water level data have temporarily ceased transmitting at Wachapreague, VA. We are attempting to bring this station back online. However, winds continue to update in real-time.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Beaufort, NC: Next predicted high tides are 3.9 ft (1.19 m) at 08/27/2011 19:15 EDT and 3.5 ft (1.08 m) at 08/28/2011 07:36 EDT.

USCG Station Hatteras, NC: Next predicted high tides are 0.6 ft (0.19 m) at 08/27/2011 20:15 EDT and 0.7 ft (0.22 m) at 08/28/2011 08:34 EDT.

Oregon Inlet Marina, NC: Next predicted high tides are 1.5 ft (0.44 m) at 08/27/2011 19:19 EDT and 1.3 ft (0.41 m) at 08/28/2011 07:41 EDT.

Duck, NC: Next predicted high tides are 4.2 ft (1.27 m) at 08/27/2011 18:44 EDT and 3.8 ft (1.17 m) at 08/28/2011 07:12 EDT.

Chesapeake Bay Bridge Tunnel, VA: Next predicted high tides are 3.3 ft (0.99 m) at 08/27/2011 19:37 EDT and 3.1 ft (0.94 m) at 08/28/2011 08:03 EDT.

Yorktown USCG Training Center, VA: Next predicted high tides are 2.0 ft (0.89 m) at 08/27/2011 20:34 EDT and 2.8 ft (0.84 m) at 08/28/2011 09:03 EDT.

Wachapreague, VA: Next predicted high tides are 5.1 ft (1.54 m) at 08/27/2011 20:10 EDT and 4.6 ft (1.41 m) at 08/28/2011 08:29 EDT.

Ocean City Inlet, MD: Next predicted high tides are 2.7 ft (0.82 m) at 08/27/2011 19:31 EDT and 2.4 ft (0.73 m) at 08/28/2011 07:42 EDT.

Lewes, DE: Next predicted high tides are 5.2 ft (1.59 m) at 08/27/2011 20:04 EDT and 4.5 ft (1.38 m) at 08/28/2011 08:29 EDT.

Cape May, NJ: Next predicted high tides are 6.1 ft (1.85 m) at 08/27/2011 19:55 EDT and 5.4 ft (1.63 m) at 08/28/2011 08:22 EDT.

Atlantic City, NJ: Next predicted high tides are 5.2 ft (1.60 m) at 08/27/2011 18:47 EDT and 4.6 ft (1.39 m) at 08/28/2011 07:17 EDT.

Wilmington, NC: Next predicted high tides are 5.0 ft (1.52 m) at 08/27/2011 21:02 EDT and 4.7 ft (1.42 m) at 08/28/2011 09:27 EDT.

Wrightsville Beach, NC: Next predicted high tides are 5.0 ft (1.54 m) at 08/27/2011 18:44 EDT and 4.6 ft (1.39 m) at 08/28/2011 07:08 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:CMF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE IRENE ADVISORY NUMBER 29  
1100 AM EDT SAT AUG 27 2011

...IRENE BATTERING EASTERN NORTH CAROLINA...TROPICAL STORM CONDITIONS  
SPREADING NORTHWARD ALONG THE DELMARVA COAST...

WATCHES AND WARNINGS

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CHANGES IN WATCHES AND WARNINGS WITH THIS ADVISORY...

THE TROPICAL STORM WARNING SOUTH OF LITTLE RIVER INLET HAS BEEN DISCONTINUED.

THE TROPICAL STORM WATCH HAS BEEN REPLACED WITH A TROPICAL STORM WARNING  
FOR THE COAST OF NEW ENGLAND FROM MERRIMACK RIVER NORTHWARD TO EASTPORT  
MAINE.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

\* LITTLE RIVER INLET NORTH CAROLINA NORTHWARD TO SAGAMORE BEACH  
MASSACHUSETTS...INCLUDING THE PAMLICO...ALBEMARLE...AND CURRITUCK  
SOUNDS...DELAWARE BAY...CHESAPEAKE BAY SOUTH OF DRUM POINT...NEW YORK  
CITY...LONG ISLAND...LONG ISLAND SOUND...COASTAL CONNECTICUT AND RHODE  
ISLAND...BLOCK ISLAND...MARTHAS VINEYARD AND NANTUCKET

A TROPICAL STORM WARNING IS IN EFFECT FOR...

\* CHESAPEAKE BAY FROM DRUM POINT NORTHWARD AND THE TIDAL POTOMAC  
\* NORTH OF SAGAMORE BEACH TO EASTPORT MAINE

INTERESTS IN EASTERN CANADA SHOULD MONITOR THE PROGRESS OF IRENE.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING  
POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY  
YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

DISCUSSION AND 48-HOUR OUTLOOK

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AT 1100 AM EDT THE CENTER OF HURRICANE IRENE WAS LOCATED ABOUT 50 MI W OF CAPE  
HATTERAS NORTH CAROLINA OR ABOUT 120 MI S OF NORFOLK VIRGINIA. IRENE IS MOVING  
TOWARD THE NORTH-NORTHEAST NEAR 15 MPH AND THIS GENERAL MOTION IS EXPECTED  
TO CONTINUE FOR THE NEXT 24 HOURS. ON THE FORECAST TRACK...THE CENTER OF IRENE  
WILL MOVE ACROSS NORTHEASTERN NORTH CAROLINA THIS AFTERNOON. THE  
HURRICANE IS FORECAST TO MOVE NEAR OR OVER THE MID-ATLANTIC COAST TONIGHT  
AND MOVE OVER SOUTHERN NEW ENGLAND ON SUNDAY.

MAXIMUM SUSTAINED WINDS REMAIN NEAR 85 MPH WITH HIGHER GUSTS. IRENE IS A  
CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SLIGHT

WEAKENING IS FORECAST AS IRENE CROSSES EASTERN NORTH CAROLINA...BUT IRENE IS FORECAST TO REMAIN NEAR HURRICANE STRENGTH AS IT MOVES NEAR OR OVER THE MID-ATLANTIC STATES AND APPROACHES NEW ENGLAND.

IRENE IS A LARGE TROPICAL CYCLONE. HURRICANE-FORCE WINDS EXTEND OUTWARD UP TO 90 MILES FROM THE CENTER...AND TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 260 MILES. A WIND GUST TO 87 MPH WAS RECENTLY MEASURED AT CAPE HATTERAS NORTH CAROLINA. NORFOLK NAVAL AIR STATION RECENTLY REPORTED A WIND GUST TO 63 MPH.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 952 MB...28.11 INCHES.

#### HAZARDS AFFECTING LAND

-----  
WIND...TROPICAL-STORM-FORCE WINDS WILL SPREAD NORTHWARD ALONG THE MID-ATLANTIC COAST TODAY WITH HURRICANE CONDITIONS EXPECTED BY THIS AFTERNOON. TROPICAL STORM CONDITIONS ARE EXPECTED TO REACH SOUTHERN NEW ENGLAND LATE THIS EVENING WITH HURRICANE CONDITIONS EXPECTED BY SUNDAY MORNING. WINDS AFFECTING THE UPPER FLOORS OF HIGH-RISE BUILDINGS WILL BE SIGNIFICANTLY STRONGER THAN THOSE NEAR GROUND-LEVEL.

STORM SURGE...AN EXTREMELY DANGEROUS STORM TIDE WILL RAISE WATER LEVELS BY AS MUCH AS 5 TO 9 FEET ABOVE GROUND LEVEL IN THE HURRICANE WARNING AREA IN NORTH CAROLINA...INCLUDING THE ALBEMARLE AND PAMLICO SOUNDS. STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 4 TO 8 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA FROM THE NORTH CAROLINA/VIRGINIA BORDER NORTHWARD TO CAPE COD INCLUDING SOUTHERN PORTIONS OF THE CHESAPEAKE BAY AND ITS TRIBUTARIES. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE...DESTRUCTIVE...AND LIFE-THREATENING WAVES. STORM SURGE VALUES ARE VERY LOCATION-SPECIFIC...AND USERS ARE URGED TO CONSULT PRODUCTS ISSUED BY THEIR LOCAL NATIONAL WEATHER SERVICE OFFICES.

RAINFALL...IRENE IS EXPECTED TO PRODUCE RAINFALL ACCUMULATIONS OF 6 TO 10 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 15 INCHES...FROM EASTERN NORTH CAROLINA NORTHWARD THROUGH THE MID-ATLANTIC STATES INTO EASTERN NEW YORK AND INTERIOR NEW ENGLAND. THESE RAINS... COMBINED WITH HEAVY RAINS OVER THE PAST FEW WEEKS...COULD CAUSE WIDESPREAD FLOODING...LIFE-THREATENING FLASH FLOODS...AND SIGNIFICANT UPROOTING OF TREES DUE TO RAIN-SOFTENED GROUNDS.

SURF...LARGE SWELLS GENERATED BY IRENE ARE AFFECTING MUCH OF THE COAST OF THE UNITED STATES. THESE SWELLS WILL CAUSE LIFE-THREATENING SURF AND RIP CURRENT CONDITIONS.

TORNADOES...ISOLATED TORNADOES ARE POSSIBLE OVER SOUTHEASTERN VIRGINIA...EASTERN MARYLAND...DELAWARE...AND SOUTHERN NEW JERSEY THROUGH THIS EVENING.

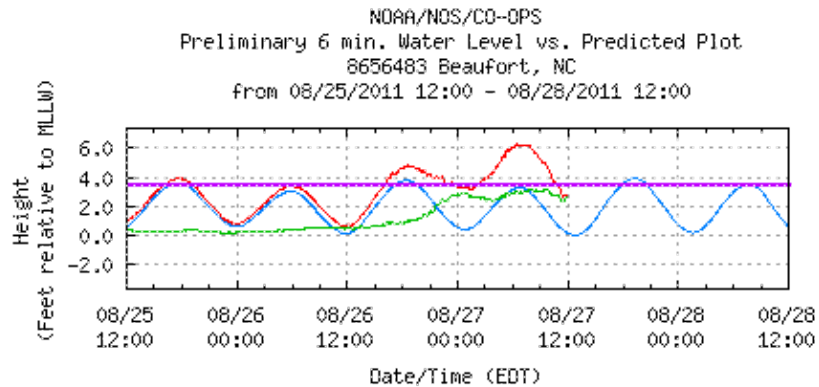
FORECASTER BROWN

## Hurricane IRENE QuickLook, POSTED 12:00 EDT 08/27/2011

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Beaufort - Water Level](#), [Beaufort - Winds](#), [Beaufort - Barometric](#), [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Duck - Air/Water Temp](#), [Chesapeake Bay Bridge Tunnel - Water Level](#), [Chesapeake Bay Bridge Tunnel - Winds](#), [Yorktown USCG Training Center - Water Level](#), [Yorktown USCG Training Center - Winds](#), [Wachapreague - Water Level](#), [Wachapreague - Winds](#), [Ocean City Inlet - Water Level](#), [Lewes - Water Level](#), [Lewes - Winds](#), [Lewes - Barometric](#), [Cape May - Water Level](#), [Cape May - Winds](#), [Cape May - Barometric](#), [Atlantic City - Water Level](#), [Atlantic City - Barometric](#), [Wilmington - Water Level](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#),

Beaufort, NC - Return to List

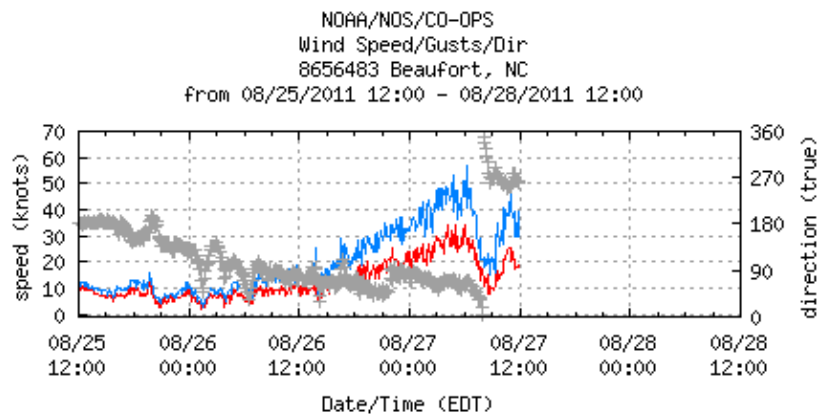


Last Observed Sample: 08/27/2011 11:54 (EDT)

Relative to MLLW: **Observed: 2.77 ft.** **Predicted: 0.19 ft.** **Residual: 2.58 ft.**

Historical Maximum Water Level: Sep 16 1999, 2.74 ft. above MHHW

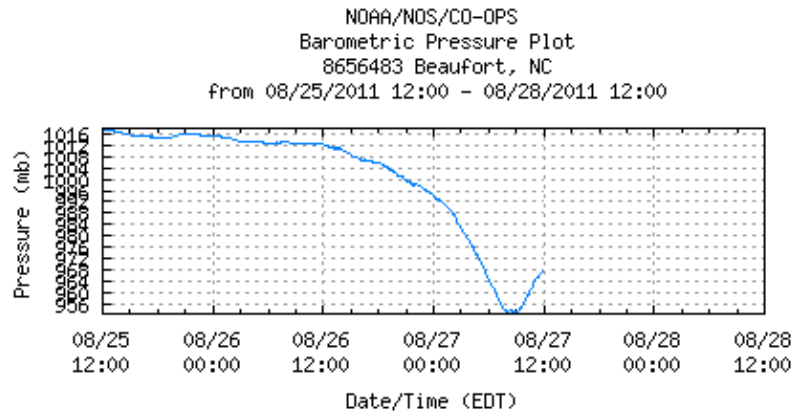
Beaufort, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

**Wind Speed: 19 knots** **Gusts: 39 knots** **Direction: 262° T**

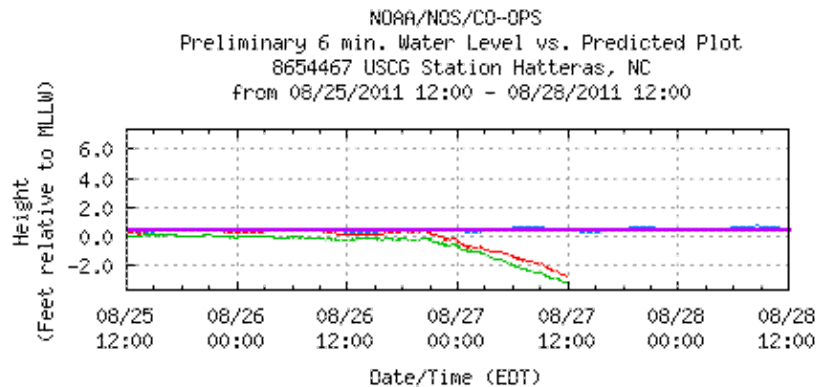
Beaufort, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Barometric Pressure: 967.6 mb

USCG Station Hatteras, NC - Return to List

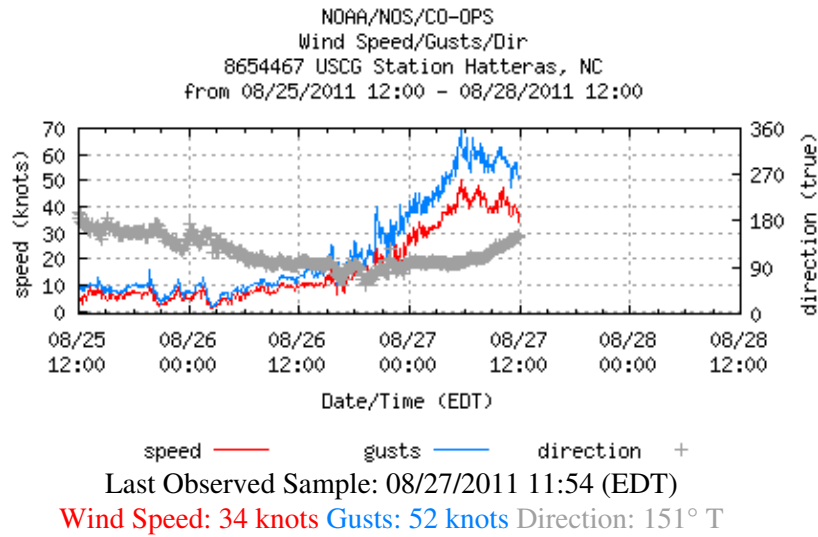


Last Observed Sample: 08/27/2011 11:54 (EDT)

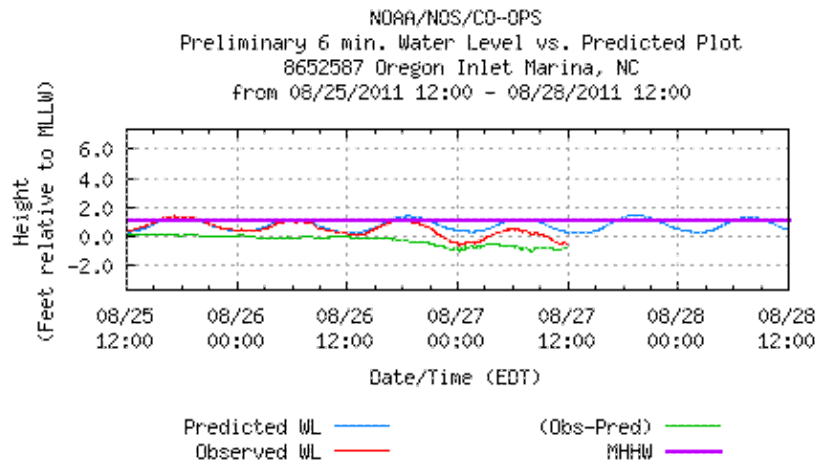
Relative to MLLW: **Observed: -2.74 ft. Predicted: 0.43 ft. Residual: -3.17 ft.**

Historical Maximum Water Level: , 0 ft. above MHHW

USCG Station Hatteras, NC - Return to List

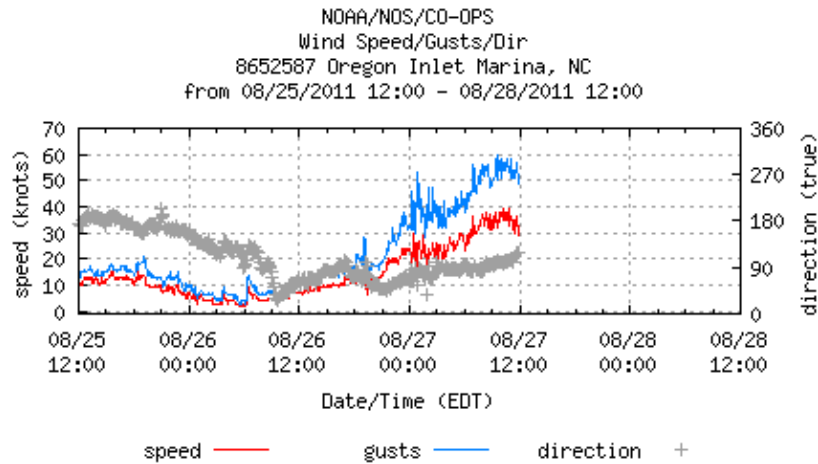


Oregon Inlet Marina, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)  
Relative to MLLW: Observed: -0.52 ft. Predicted: 0.30 ft. Residual: -0.82 ft.  
Historical Maximum Water Level: Sep 16 1999, 4.48 ft. above MHHW

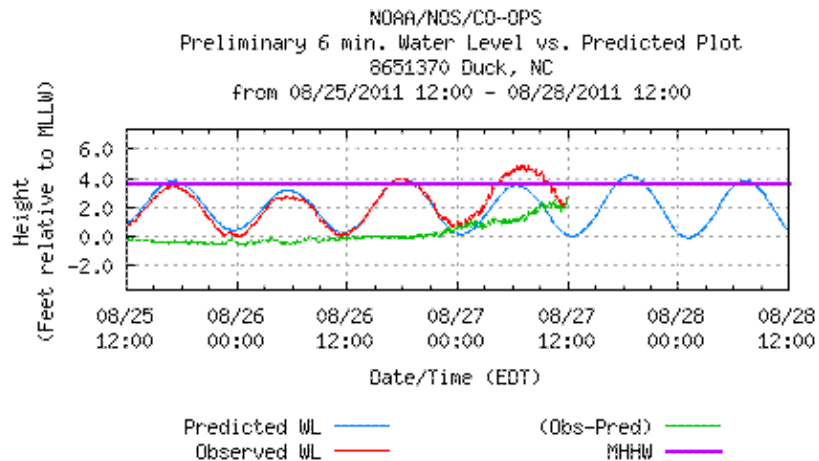
Oregon Inlet Marina, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Wind Speed: 31 knots Gusts: 50 knots Direction: 117° T

Duck, NC - Return to List

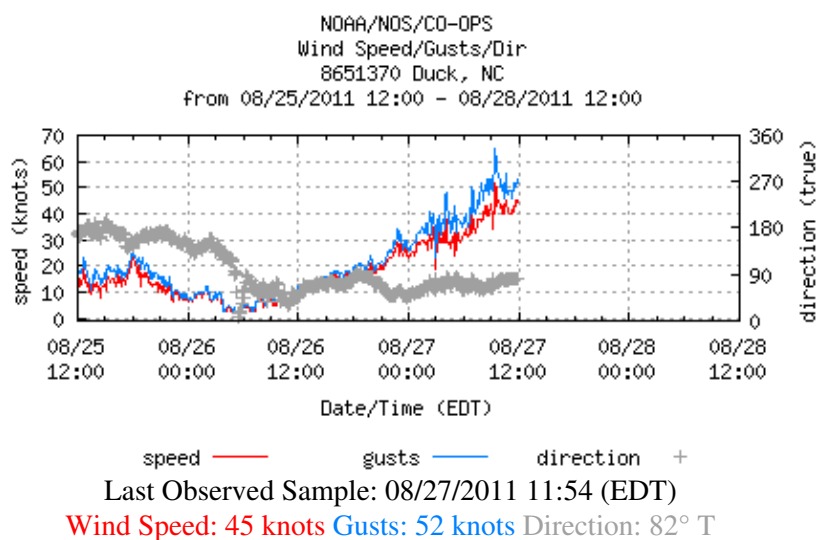


Last Observed Sample: 08/27/2011 11:54 (EDT)

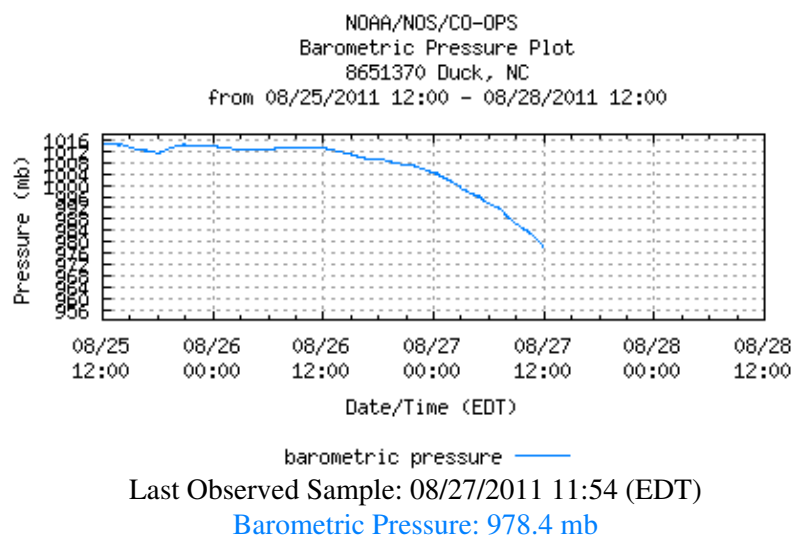
Relative to MLLW: Observed: 2.57 ft. Predicted: 0.11 ft. Residual: 2.46 ft.

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above MHHW

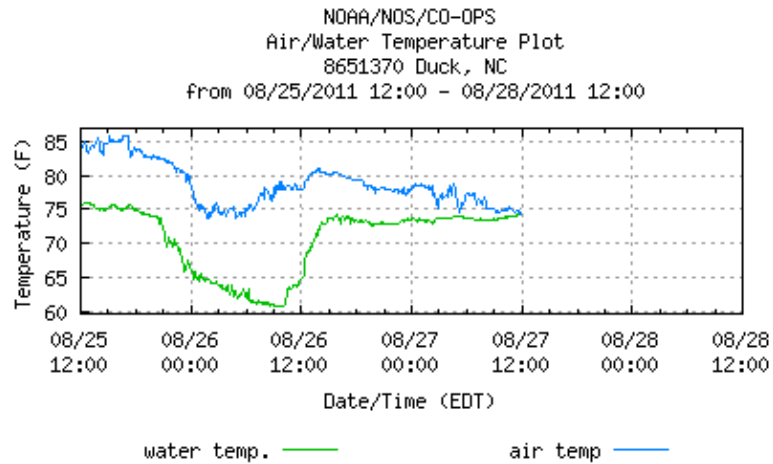
[Duck, NC - Return to List](#)



[Duck, NC - Return to List](#)



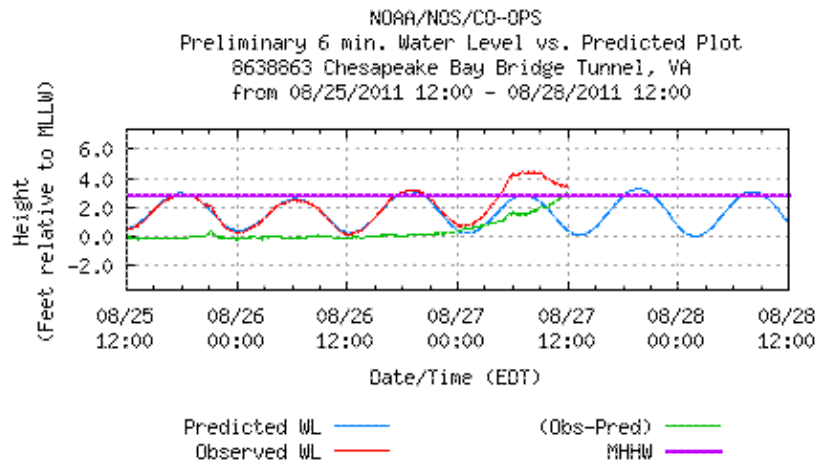
Duck, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Water Temperature: 74.5° F Air Temperature: 74.5° F

Chesapeake Bay Bridge Tunnel, VA - Return to List

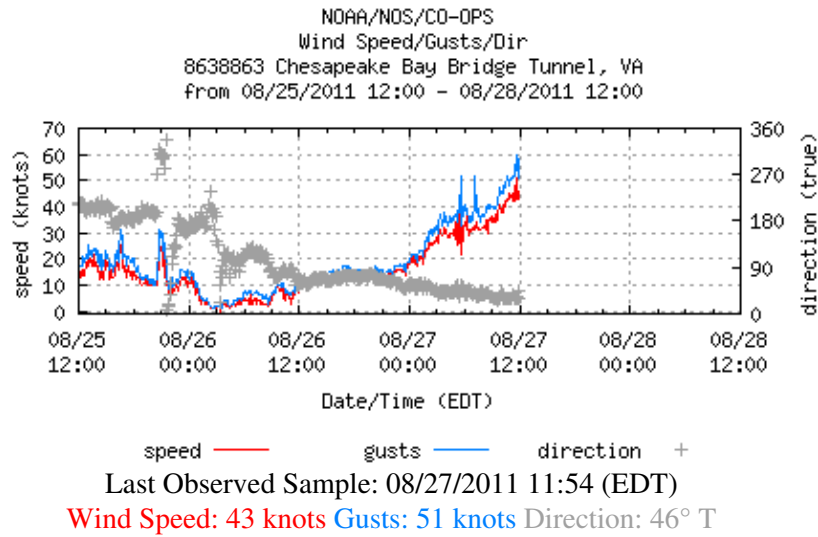


Last Observed Sample: 08/27/2011 11:54 (EDT)

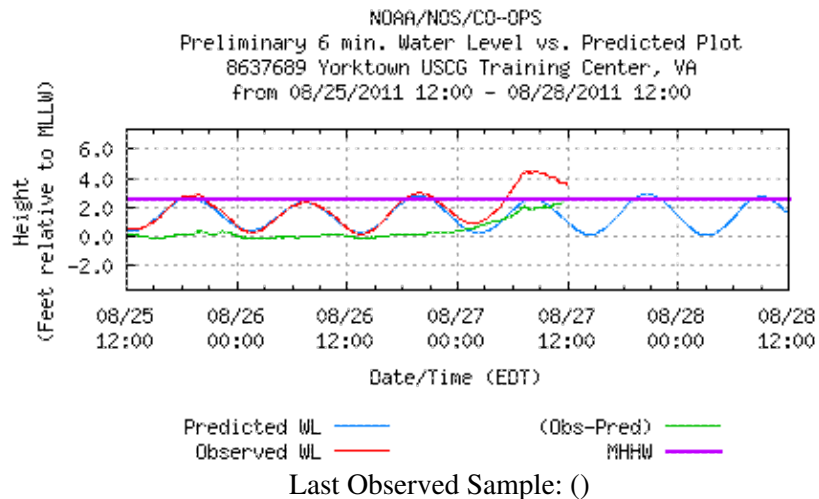
Relative to MLLW: Observed: 3.49 ft. Predicted: 0.45 ft. Residual: 3.04 ft.

Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above MHHW

Chesapeake Bay Bridge Tunnel, VA - Return to List

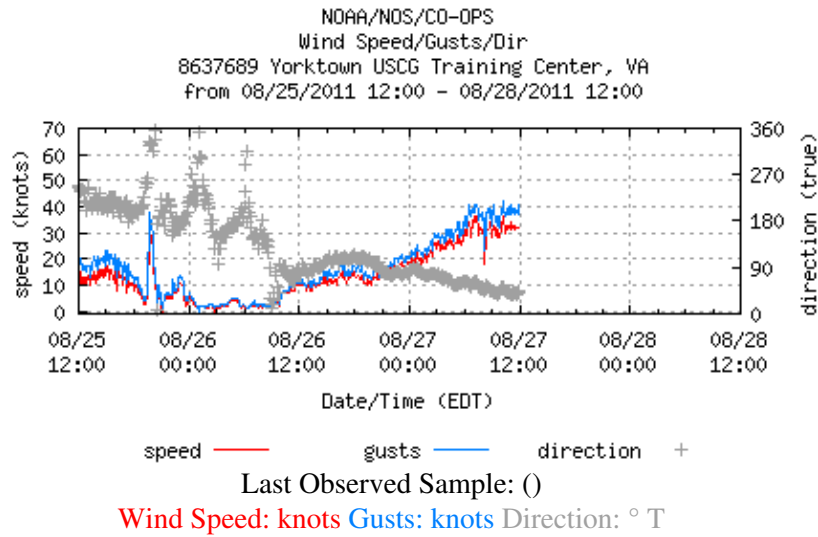


Yorktown USCG Training Center, VA - Return to List

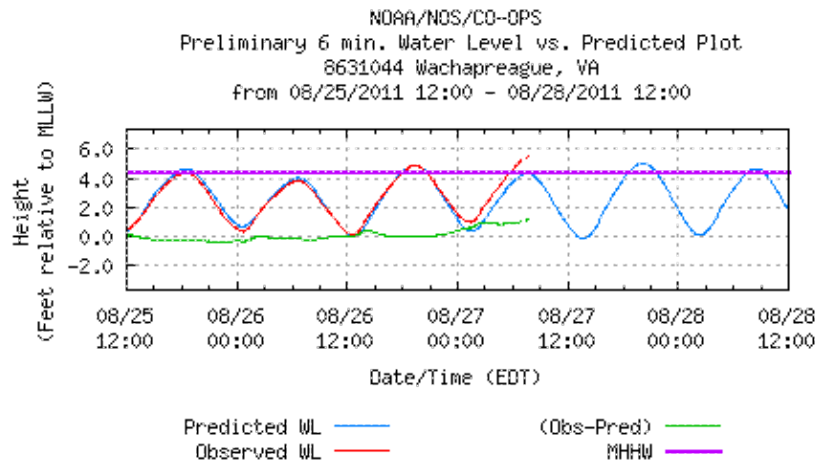


Relative to MLLW: Observed: ft. Predicted: ft. Residual: n/a  
Historical Maximum Water Level: Nov 12 2009, 4.27 ft. above MHHW

Yorktown USCG Training Center, VA - Return to List



Wachapreague, VA - Return to List

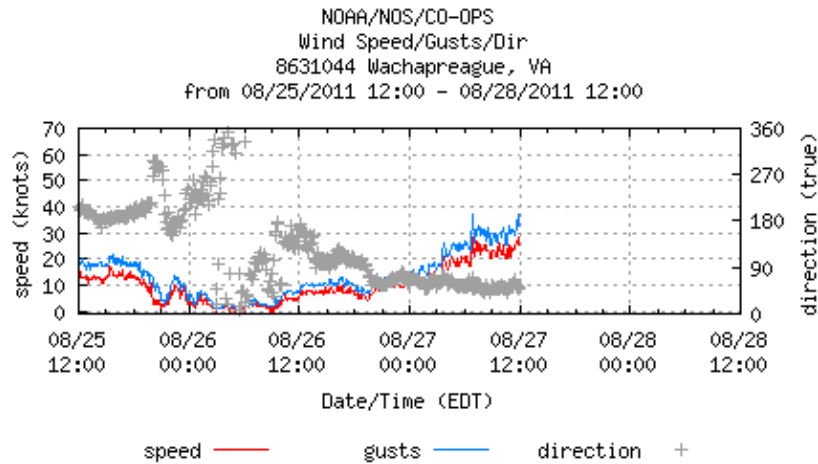


Last Observed Sample: 08/27/2011 07:36 (EDT)

Relative to MLLW: Observed: 5.47 ft. Predicted: 4.33 ft. Residual: 1.14 ft.

Historical Maximum Water Level: Feb 5 1998, 4.41 ft. above MHHW

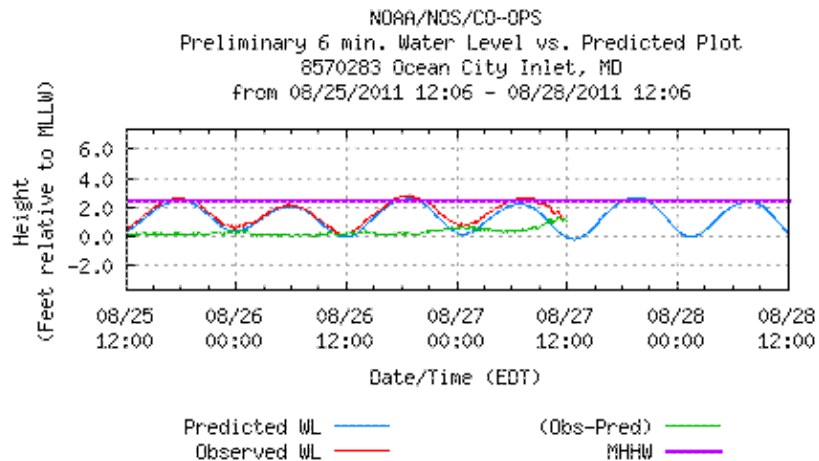
Wachapreague, VA - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Wind Speed: 25 knots Gusts: 33 knots Direction: 49° T

Ocean City Inlet, MD - Return to List

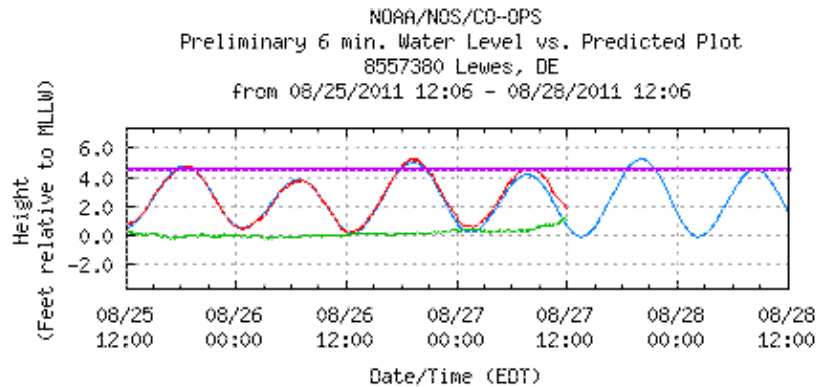


Last Observed Sample: 08/27/2011 11:54 (EDT)

Relative to MLLW: Observed: 1.04 ft. Predicted: -0.05 ft. Residual: 1.09 ft.

Historical Maximum Water Level: Feb 5 1998, 3.61 ft. above MHHW

Lewes, DE - Return to List



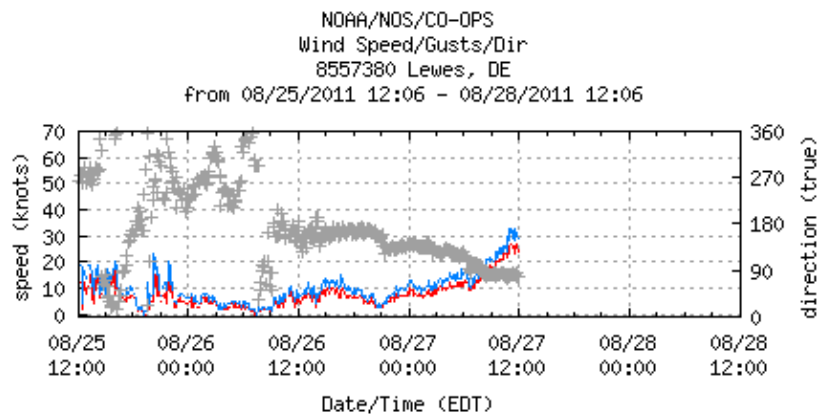
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/27/2011 11:54 (EDT)

Relative to MLLW: **Observed: 1.84 ft.** **Predicted: 0.75 ft.** **Residual: 1.09 ft.**

Historical Maximum Water Level: Mar 6 1962, 4.57 ft. above MHHW

Lewes, DE - Return to List

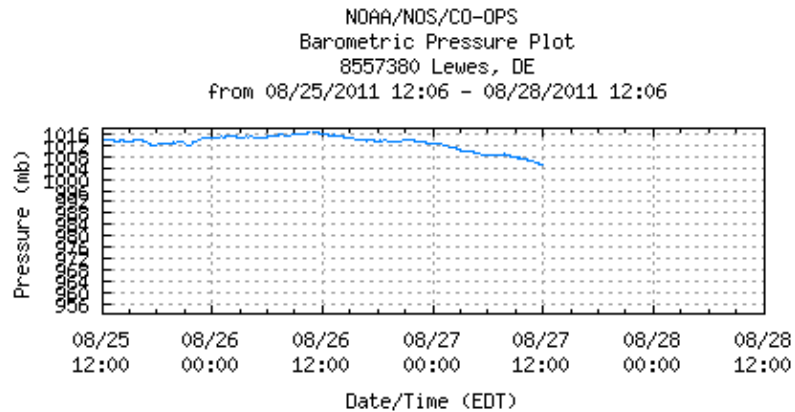


speed — gusts — direction +

Last Observed Sample: 08/27/2011 11:54 (EDT)

**Wind Speed: 24 knots** **Gusts: 29 knots** **Direction: 78° T**

Lewes, DE - Return to List

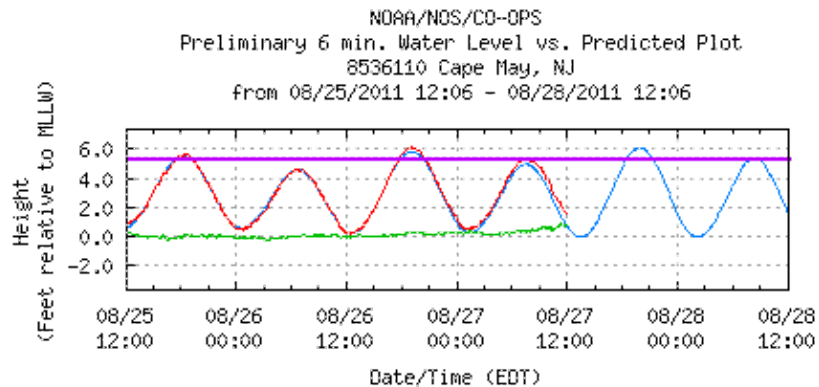


barometric pressure —

Last Observed Sample: 08/27/2011 11:54 (EDT)

Barometric Pressure: 1005.0 mb

Cape May, NJ - Return to List



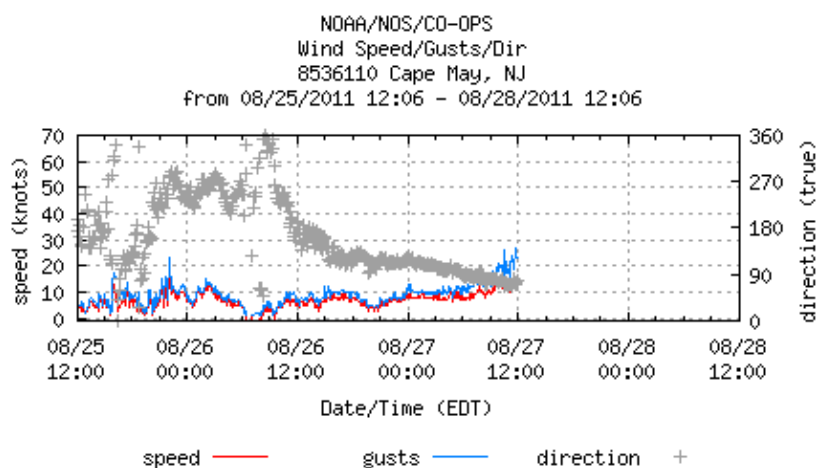
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/27/2011 11:54 (EDT)

Relative to MLLW: **Observed: 1.53 ft.** **Predicted: 0.79 ft.** **Residual: 0.74 ft.**

Historical Maximum Water Level: Sep 27 1985, 3.36 ft. above MHHW

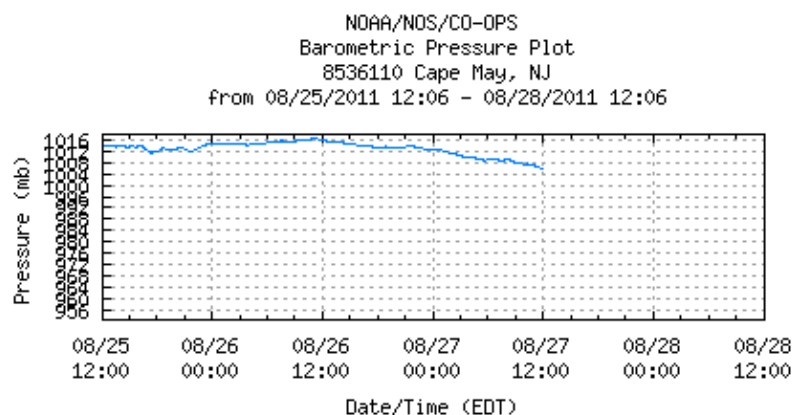
Cape May, NJ - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Wind Speed: 13 knots Gusts: 23 knots Direction: 79° T

Cape May, NJ - Return to List

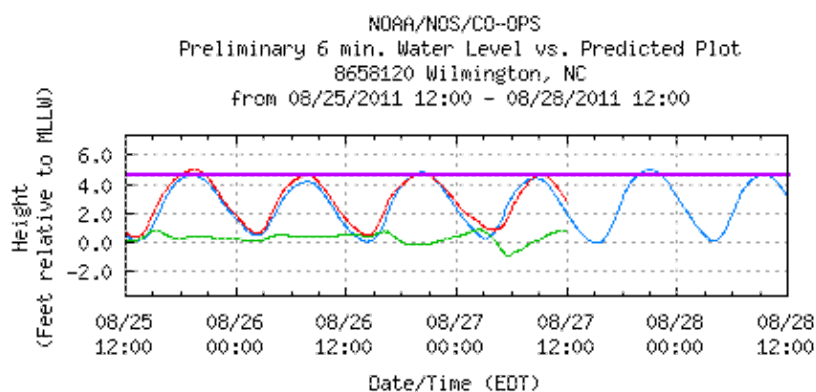


Last Observed Sample: 08/27/2011 11:54 (EDT)

Barometric Pressure: 1005.6 mb



Wilmington, NC - Return to List



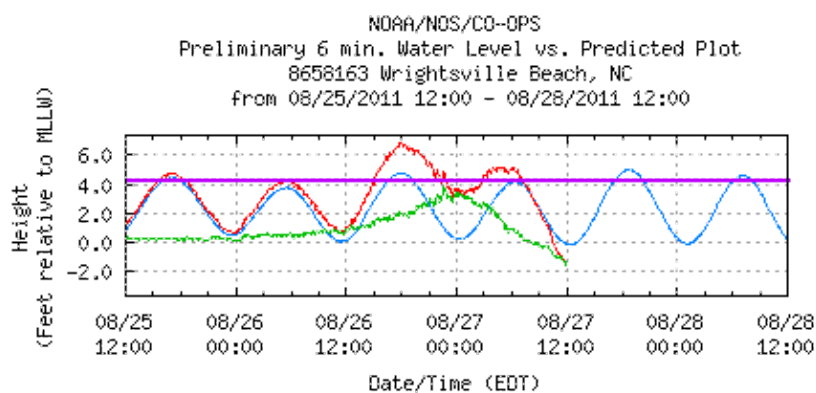
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/27/2011 11:54 (EDT)

Relative to MLLW: **Observed: 2.91 ft. Predicted: 2.08 ft. Residual: 0.83 ft.**

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. above MHHW

Wrightsville Beach, NC - Return to List



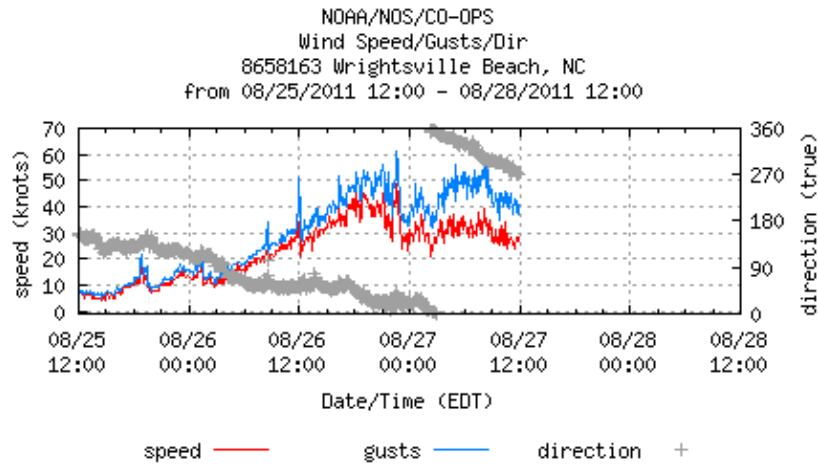
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/27/2011 11:54 (EDT)

Relative to MLLW: **Observed: -1.60 ft. Predicted: -0.09 ft. Residual: -1.51 ft.**

Historical Maximum Water Level: Sep 25 2008, 2.81 ft. above MHHW

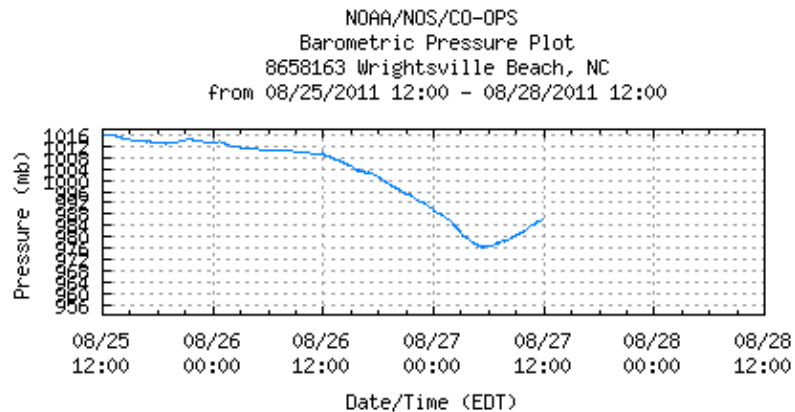
Wrightsville Beach, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Wind Speed: 27 knots Gusts: 37 knots Direction: 271° T

Wrightsville Beach, NC - Return to List



Last Observed Sample: 08/27/2011 11:54 (EDT)

Barometric Pressure: 986.1 mb

Hurricane IRENE QuickLook, POSTED 12:00 EDT 08/27/2011

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce